

1 What is claimed is:

2  
3 1. A power compass saw (10) with a housing (12) that accommodates a  
4 lifting rod for the up and down movement of a longitudinal saw blade (27)  
5 attached thereto, the saw blade having a toothed side and a saw blade back  
6 (270), and with a guide roller (29) which supports the saw blade back (270) and  
7 has a central circumferential groove (290) into which the saw blade extends with  
8 its saw blade back (270) and is guided therein, whereby the sides of the  
9 circumferential groove (290) are tapered,  
10 wherein the saw blade back (270) of the saw blade is designed with a 7° conical  
11 configuration and/or taper on both sides, so that it tapers toward the saw blade  
12 back (270) and is capable of being supported in two dimensions in the  
13 circumferential groove (290), the groove sides (291) of which have a 5° taper.

14  
15 2. The power compass saw as recited in Claim 1,  
16 wherein the taper of the saw blade back (270) is formed in a noncutting manner,  
17 and is stamped in particular.

18  
19 3. The power compass saw as recited in Claim 1,  
20 wherein the guide roller (29) serves as reciprocating stroke-support roller.

21  
22 4. The power compass saw as recited in Claim 1,  
23 wherein the saw blade back (270) is wider than the groove bottom (292) of the  
24 circumferential groove (290) of the guide roller (29), in particular no wider than  
25 1.5 mm.

26  
27 5. The power compass saw as recited in Claim 1,  
28 wherein the groove sides (291) of the central circumferential groove (290) have a  
29 5° taper.

30  
31 6. The power compass saw as recited in Claim 1,

1 wherein the guide roller (29) has a diameter of 10 to 25 mm, and the groove is as  
2 deep as possible, in particular at least 5 mm deep.

3

4 7. The power compass saw as recited in Claim 1,  
5 wherein the groove bottom (292) is less wide than the saw blade back (270), in  
6 particular not wider than 1.4 mm.